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United States Marine Corps
Command and Staff College
Marine Corps University
2076 South Street
Marine Corps Combat Development Command
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MASTER OF MILITARY STUDIES

THE APPROPRIATE GENERAL PURPOSE FORCE (GPF)
CAPABILITY MIX OF THE US ARMY 2016-2020

SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF MILITARY STUDIES

MAJ JAMES (BEN) BIRD, UNITED STATES ARMY

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Mentor and Oral Defense Committee Member: CHARLES D. MCKENSA

Approved: Charles D. McKensa

Date: 16 MARCH 2011

Oral Defense Committee Member: J. W. Gordon

Approved: J. W. Gordon

Date: 16 March 2011

Executive Summary

Title: The Appropriate General Purpose Force Capability mix of the United States Army 2016-2020.

Author: MAJ James (Ben) Bird, United States Army

Thesis: The future operating environment in the 2016-2020 timeframe demands that the army adjust, by Warfighting function, the active Army's General Purpose Forces (GPF) capabilities mix to properly counter threats and weigh US Army efforts.

Discussion: The 2010 Quadrennial Defense Review outlined the active US Army Force Structure for fiscal years 2011-2015 as 4 Corps and 10 Division Headquarters, 45 BCTs (20 IBCTs, 8 SBCTs, and 17 HBCTs), 15 PATRIOT Battalions, and 7 THAAD batteries. This force mix was determined as adequate to counter security challenges and threats in the 2011-2015 timeframe. Further thought and plans must be developed and approved in order to develop, transform, and prepare the force for 2015 and beyond. This paper outlines the modular Army's current structure, planned adjustments in the 2011-2015 timeframe, how the Army envisions the future, and recommended adjustments by Warfighting function for 2016-2020. Army leaders must adjust the 2016-2020 active force structure capabilities to address emerging threats in the cyber domain, refine requirements in support of wide area security while rebuilding core proficiencies in combined arms maneuver. With financial realities and planned force reductions in mind, this can be accomplished by: converting two Infantry Brigade Combat Teams (IBCTs) to Stryker Brigade Combat Teams (SBCT), modernizing but maintaining current Field Artillery force structure, adjusting Intelligence organizations and staffs to counter cyber threats, maintaining and modernizing Protection efforts, specifically Air and Missile Defense (AMD), conducting a small reduction in Sustainment forces, and, finally, maintaining current numbered Headquarters at Corps and Division levels to adequately conduct mission command (formerly known as command and control).

Conclusion: The afore mentioned changes to active Army force structure in the 2016-2020 timeframe, if adopted, would increase the US Army's ability to conduct full spectrum operations with a clear focus and effort towards wide area security and cyber while regaining core proficiencies in combined arms maneuver. These efforts ensure emerging security threats are mitigated and resident capabilities exist to confront contingencies. These adjustments to the active Army's force posture, while controversial to some in the Army community, particularly Logisticians, would better prepare the entire Army community (Active, Reserve, Guard, Industrial base, etc) for emerging threats and full spectrum operations.

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Preface

Since the country's inception United States civilian and military leadership have continually struggled to organize, man, and equip military forces adequately prepared for wars and unforeseen contingencies. Rarely if ever have the leaders gotten it right. Reasons vary but an important one is mankind's inability to accurately predict future environments.

With the publishing of the 2010 Quadrennial Defense Review, the US Government (USG) had determined its Army's force structure and mix for 2011-2015. What interested me was what the Army's General Purpose Forces (GPF) would and should look like, by Warfighting Function, in the outlying years of 2016-2020. What insights could be gathered and determined from National Strategic Guidance, the DOD and Army vision documents, leadership statements, and acknowledged USG financial concerns?

As I progressed in my topic choice, research, and writing of this paper I appreciate all my colleagues and mentor's assistance, guidance, and ideas as this truly was an informative and developmental experience.

Introduction.

The 2010 Quadrennial Defense Review (QDR) outlined active US Army Force Structure for fiscal years 2011-2015 with robust General Purpose Forces (GPF) deemed adequate to contend with complex security challenges in the near future.¹ With the QDR dictating Army force structure for 2011-2015 it is evident that preparations, detailed analysis, and debate must begin on what the force capability mix should be for outlying years beyond 2015. To these ends, this paper will examine elements of the active Army's current force structure, adjustments per Army directives in the 2011-2015 timeframe, how the Army envisions the future, and conclude with the author's recommended adjustments by select elements of Warfighting functions for the 2016-2020 period. This paper specifically focuses on active component General Purpose Forces (GPF) and will not cover US Army Special Operations Forces (SOF) or the National Guard or Army Reserve.

Current US Army force structure reflects the Army's transformation from a Division centric to Brigade centric modular Army while also completing the active Army's growth of 80,000 during the past three years.² Future cost saving measures announced after the QDR in January 2011 will begin active Army force reduction in or around the 2013-2015 timeframe.³ In conjunction with these changes, Army efforts in 2011-2015 are to restore balance to the force from the extended pressures of the Iraq and Afghan wars by sustaining Army Soldiers, families, and civilians while preparing forces for the current conflict (Afghanistan, Iraq, and Philippines), resetting redeployed personnel and equipment while continuing to transform the force to meet future demands.⁴ These attempts at restoring balance will set the conditions for the future Army and its ability to meet the challenges in 2016-2020.

The entire DOD community faces challenges to win current wars and plan for the future with less financial resources. These challenges are compounded by the necessity to prepare for

future threats and contingencies from nation states and non-state actors.⁵ For the Army implications are many in that financial constraints realized now and in the near future will be due to the US government's fiscal challenges and competing demands from the US Navy and US Air Force.⁶ Since 9/11, considerable DOD effort and spending have been directed to US Army and US Marine Corps land forces due to operations in Afghanistan and Iraq. This may not be true in the future as emerging threats are identified.

The future operating environment and its inherent security challenges in the 2016-2020 timeframe will demand the army review and adjust the active Army's GPF capability mix by Warfighting function (Movement and Maneuver, Fires, Intelligence, Protection, Sustainment, and Mission Command). The proper mix of force capabilities by Warfighting function will be critical in forces remaining adaptable and capable enough to conduct full spectrum operations, specifically, the Army Operating Concept's (AOC) concerns regarding wide area security and combined arms maneuver.⁷

Context/Background.

A review of US Army transformation is essential to understand the Army we currently have. Beginning in 2003, the Army began transitioning from a Division organized to modular Brigade structured Army with three modular headquarters above Brigade level: Theater Army, Corps, and Division levels. These changes increased capability, scalability, and flexibility in meeting requirements in support of any combination of offensive, defensive, and stability or civil support operations. Modular Brigade Combat Teams (BCT) provide a versatile mix of forces with Heavy, Stryker (medium), and Light Infantry variants creating tailorable forces with capabilities previously residing at higher levels. Organic to modular BCTs are robust Military

Intelligence, Signal and Logistic capabilities, and a BCT staff capable of receiving key enablers such as ISR, psychological operations, civil affairs, and others to accomplish assigned missions.⁸

In order to increase Total Army interoperability, this transformation was not only for maneuver (BCTs) and Headquarter elements at Division and Corps levels but also for Active, Guard, and Reserve modular support and functional Brigades. Modular Support Brigades consist of Battlefield Surveillance Brigades, FIRES Brigades, Combat Aviation Brigades, Sustainment Brigades, and Maneuver Enhancement Brigades. Functional Brigades consist of Engineer, Military Police, CBRN (Chemical, Biological, Radiological, and Nuclear), Air and Missile Defense (AMD), Signal, Explosive Ordnance Disposal, Medical, and Intelligence Brigades.⁹

As of 2010, 88% of Army Brigades were modular with a goal of all 302 Total Army (Active, Reserve, and National Guard) Brigades converted to the modular construct by 2012.¹⁰ These conversions, along with other efforts, comprise the greatest transformation to the Total Army force since WWII and greatly increase interoperability and the capabilities of Army forces to Service Components and Combatant Commands (COCOMs) around the world.¹¹

Another significant change was the 2008 update to Army Field Manual 3-0, *Operations*, with its conversion from the Battlefield Operating System (BOS) to the Warfighting Function Framework (WFF) consisting of movement and maneuver, intelligence, fires, sustainment, command and control (recently renamed mission command), and protection. The framework groups tasks and systems (people, organizations, information, and processes) into a common purpose that commanders then use to accomplish the mission or assigned objectives. These WFFs organized all branches of the Army, their units, and their personnel on staffs throughout the Army and was instrumental in Transforming the Army to become more adaptable, lethal, and interoperable.¹²

Worldwide commitments after 9/11 exponentially increased land force use abroad in theaters including Afghanistan, Iraq, the Philippines and Africa. Central Command's (CENTCOM) Operation Enduring Freedom (OEF), which has been conducted since 2001, and Operation Iraqi Freedom (OIF) since 2003 which is now Operation New Dawn (OND), created unanticipated and extended stresses on the Total Army. These requirements were further exacerbated by the 2007 surge in Iraq and the ongoing surge in Afghanistan begun in 2010, the latter being somewhat mitigated by the drawdown in Iraq. These contingencies in the CENTCOM Area of Responsibility (AOR) created large requirements for low-density forces such as Military Police, Intelligence, Aviation, and SOF to support Counter-Insurgency operations over sustained periods. This required the Army to quickly reclassify over 150,000 Soldiers out of so-called "Cold War skill sets to more relevant skill sets for the current fight."¹³ This is an example of the adaptability of soldiers, Army leaders, and the supporting training base to adjust as needed to meet requirements.

US Army troop commitments outside of the CENTCOM AOR cannot be discounted as large requirements in Asia (Japan and Korea), Europe (Germany and Italy), and numerous other areas are crucial aspects of COCOM Theater Security Cooperation (TSC) requirements and provide robust deterrence with their forward presence.¹⁴ The recently established AFRICOM will continue to develop partner capacity via Theater Security Cooperation (TSC) which will further increase short duration requirements for forces although no permanent stationing is anticipated. SOUTHCOM continues operations but anticipates no increase in requirements as they continue to operate primarily with SOF forces and very limited GPF forces. An indicator of the immense deployed presence abroad are Army records stating that approximately 230,000

Soldiers are forward deployed to 80 countries around the world with over 140,000 of these serving in Iraq, Afghanistan, Kuwait and the Horn of Africa.¹⁵

US Army adjustments planned for 2011-2015 include completing active Army growth to 569,400 in 2011-2012 and then initiating reductions to 547,400 by the end of 2013 with total reduction to approximately 520,000 in or around 2016.¹⁶ These reductions are tied closely to the Afghanistan draw down plan and thus are fluid but are focused on reducing costs in a fiscally constrained environment. As previously mentioned, Army objectives include restoring balance to the force (Sustain, Prepare, Reset, and Transform) while providing forces to the current fight and preparing for future operations.¹⁷ Financial constraints are likely to increase as the government reins in spending to reduce high debt levels to secure long-term solvency of the US economy and US Government (USG).

Security threats facing the Army in 2011-2015 are assessed to include ongoing operations in Iraq, Afghanistan, the Philippines and other possible conflicts between state, non-state, and individual actors who have capabilities to use violence to achieve political or ideological goals.¹⁸ These threats, to include ongoing efforts against Al Qaeda and other violent extremist groups, may seem like common sense but they will drive the near term update of Army DOTMLPF (Doctrine, Organization, Training and Education, Material, Leadership, Personnel, and Facilities) in order to set conditions for ongoing operations in Afghanistan and Iraq while preparing for increasingly complex and ambiguous threats in an uncertain future. One has only to consider nation states such as Iran and North Korea and emerging Al Qaeda affiliates in other parts of the world (i.e., Africa) to realize the uncertainty in the near term.

The President, Department of State (DOS), Department of Defense (DOD), and the Joint Staff have all attempted to predict and shape each Service's outlook towards the future to

adequately prepare for emerging threats and trends, anticipated challenges, and unforeseen contingencies. The Army Training and Doctrine Command's (TRADOC) Army Capstone Concept 2016-2028 (TRADOC Pamphlet 525-03) describes the future environment, security challenges, and requirements while the Army Operating Concept 2016-2028 (TRADOC Pamphlet 525-3-1) states the Army must be able to provide wide area security and combined arms maneuver in all spectrums of conflict.¹⁹

The afore mentioned TRADOC documents describe the future environment in the 2016-2020 time frame as a persistent state of conflict including a, "full spectrum of operations ranging from humanitarian and civil support to counterinsurgency to general war, often simultaneously."²⁰ This anticipation of persistent conflict beyond 2015 is due to exponential increases in globalization, shifting demographics, and population growth in the underdeveloped world.²¹ Further increases in the capability of non-state actors and the inevitable possibility of failing states compound these changes. Emerging threats such as Cyber warfare and the rise of nations such as Iran, China, and Russia's re-emergence coupled with long standing threats such as North Korea demand proper adjustment of forces rather than stagnation or the status quo. These threats arguably are not specific to 2016-2020 but with noticeable global trends may increase exponentially as technological advances and cost reductions create opportunities for those wishing to contest US goals domestically and internationally.²²

This set of challenges and ambiguity anticipated in 2016-2020 have great implications for the US Army's Title X responsibilities. Requirements of the Army to defend the homeland and national interests abroad remain unchanged.²³ An increased focus on Security Cooperation and increasing partner capacities in national level strategic guidance documents such as the National Security Strategy, National Defense Strategy, Global Employment of the Force (GEF) and the

Quadrennial Defense Review highlight a national versus service transition from contingency planning to long term strategic shaping operations around the globe aimed at preventing conflicts before they arise. This transition has already begun changing Army Service Component Commands (ASCCs) planning and will continued to do so in the future, arguably even more during the 2016-2020 timeframe. These realities and the efforts in the 2011-2015 timeframe will require further refinement and adjustments to ensure a mix of capabilities & flexibility to counter threats and challenges in 2016-2020.

Analysis.

The previous portions of this paper reviewed current Army force structure, recent experiences (stress to the force), anticipated threats and the Army's efforts in the 2011-2015 timeframe. With this background knowledge, further analysis can proceed by Warfighting function to determine what adjustments should be made to the Army force capability mix to counter threats and weigh US Army efforts properly from 2016 to 2020.

Movement and Maneuver Warfighting Function.

The Army defines the movement and maneuver Warfighting function as, “the related tasks and systems that move forces to achieve a position of advantage in relation to the enemy. Direct fire is inherent in maneuver, as is close combat.”²⁴ For this paper, movement and maneuver will relate to the Army’s maneuver elements of forty-five Brigade Combat Teams (BCTs) and their three variants: Heavy Brigade Combat Team (HBCT), Stryker Brigade Combat Team (SBCT), and Infantry Brigade Combat Team (IBCT). BCTs are combined arms organizations that form the basis of Army tactical formations. The Army currently has seventeen HBCTs, eight SBCTs, and twenty IBCTs in the active force for a total of forty-five. These

organizations provide the Army with tailorable land combat power for any combination of offensive, defensive, stability or civil support operations.²⁵

Movement and Maneuver unit updates during the 2011-2015 timeframe include aggressive BCT modernization efforts with incremental updates of emerging technologies. These updates include such elements as MRAP variant fielding and other capability packages to fill gaps created by changing conditions on the battlefield. These so called “capability packages” will include DOTMLPF solutions aligned with Army Force Generation (ARFORGEN) to fill the capability gap at the unit level before deployment. This incremental approach aligned with ARFORGEN will provide units entering combat the most up to date domain solutions.²⁶ The BCT Modernization plan may be hampered by financial constraints and thus could leave the Army achieving less than desired in updating all BCTs with spin off technologies and “capability packages.” Any and all shortfalls to these modernization efforts will be carried forward to the 2016-2020 timeframe to include non-standardization of equipment and capabilities throughout the Total Army, hampering interoperability and creating training challenges for unit leadership.

The current mix of BCT variants (17 HBCT, 8 SBCT, 20 IBCT) provides the Army, as land force provider to COCOMs, tailorable and scalable formations to meet requirements throughout the spectrum of conflict. For high-intensity combat operations the HBCT provides tremendous striking power with its mechanized forces but requires significant air and sea lift to deploy and be sustainable. IBCTs provide the best capability in close terrain and densely populated areas, and are easier to sustain and deploy than other BCT variants. However, they lack the firepower of the HBCT. IBCTs also include special purpose variants for airborne or air assault operations. The SBCT “balances combined arms capabilities with significant strategic and intratheater mobility” and has considerable operational reach, which has been proven in Iraq

and Afghanistan. SBCTs have greater protection, mobility, firepower than the IBCT and are more deployable than the HBCT.²⁷

The current BCT variant force mix is appropriate to match threats per the QDR timeframe, but for 2016-2020 the number of IBCTs should be decreased by two from twenty to eighteen while increasing SBCTs by two from eight to ten. Thus, in order to minimize the cost of this conversion and not increase the total number of BCTs, two active IBCTs should be converted to SBCTs prior to 2016. The reasons are several: operations in Iraq and Afghanistan have shown that BCTs will need to effectively cover more battle space versus less (new Army lexicon refers to “wide area security”) which best suits the SBCT; SBCT’s increase the full spectrum capability of the active force with special emphasis on COIN, humanitarian and security cooperation efforts in COCOM AORs; SBCTs are more deployable than HBCTs and have more impact on the battlefield than IBCTs. Finally, the SBCT is well suited to adapt to less intense (humanitarian) or more intense (high-intensity) threats than either the IBCT or HBCT respectively. This increase in SBCTs will bring the total number of SBCTs to ten. This adjustment supports the movement and maneuver requirements identified in the Army Operating Concept, 2016-2028 regarding the 2016-2020 timeframe.²⁸ This adjustment will ensure adequate HBCTs are available for high intensity nation state contingencies, adequate IBCTs are available for traditional urban based conflicts, and the increase of two SBCTs creates more capability in the so called “middle road” areas of concern related to the majority of COCOM requirements.

FIRES Warfighting Function.

The warfighting function of FIRES is defined as the related tasks and systems that provide coordinated use of Army indirect fires, joint fires, and command and control warfare to include nonlethal fires throughout the targeting process.²⁹ For this paper FIRES will focus on the

active component Field Artillery (FA) Force. Transformation and modularity drastically reduced the active Artillery force with inactivation of ten Divisional Artillery (also known as DIVARTY) Brigade sized organizations that were organic to Divisions and instead provided organic Field Artillery (FA) battalions to each of the 45 maneuver BCTs. This had 2nd and 3rd order effects as FA Battalions organic to BCTs performed maneuver, and thus non-artillery, type missions in support of OIF and OEF. This resulted in atrophy of key artillery skill sets and experience in the FA force. Current efforts to regain this perishable skill set are ongoing with combat operations in Afghanistan relying heavily on indirect fires that will increase experience levels. In addition to the FA units organic to BCTs, five FIRES Brigades remain as modular support brigades supporting Division, Corps, or Theater Armies as appropriate.³⁰

Actions in the 2011-2015 timeframe for the FIRES force include activating the sixth FIRES Brigade and completing the fielding of the M777A2 Lightweight 155 mm howitzer by FY 12 and the High Mobility Artillery Rocket Systems (HIMARS) in FY 15. These upgrades, along with the enhancements in Sensors and data processing systems for the FA force, will vastly increase modernization.³¹ Ongoing efforts by the Field Artillery in other DOTMLPF domains include updating doctrine for new threats incorporating lessons learned from OIF and OEF, leadership familiarity training on modernized systems, and rotating FA units through Training Centers conducting fire missions during Mission Rehearsal Exercises (MRE) versus maneuver type missions.

The afore mentioned actions from 2011 to 2015, coupled with increased use of Field Artillery indirect fires in Afghanistan, will increase the artillery skills of the force while increasing leadership experience in fire support planning and execution. While these gains and increases in knowledge are admirable the FIRES force must regain basic artillery skills in order

to quickly adjust and, if need be, conduct high-intensity combat operations. With this in mind, further development of efficiencies, training, and shared experiences of the FIRES force must be utilized as increases in FA force structure are not warranted by the threat, financial realities, and the increased use of Joint Fires from all Services.

The current active duty Field Artillery organizational layout and force mix, although smaller than pre-transformation, are capable of meeting current and future COCOM requirements as long as continued upgrading of equipment and baseline organizations (i.e., 5 FIRES BDEs and 45 FA Battalions organic to BCTs) are maintained.³² This increase in capability with no adjustment in its overall force structure size supports the FIRES requirements identified in Army Operating Concept for the 2016-2020 timeframe.³³ This force is currently capable and sufficient to counter threats from high intensity type opponents like North Korea and provide precision fires in support of COIN or urban fights with organic FA Battalions in BCTs. These capabilities will increase incrementally in the near future under modernization efforts. When needed, functional FA Brigades can provide reinforcing fires, ensuring the FIRES force remains the King of Battle now and into the foreseeable future.

Intelligence Warfighting Function.

The Intelligence warfighting function consists of the related tasks and systems facilitating understanding of the operational environment which includes the enemy, terrain, and civil considerations.³⁴ This paper will refer to the Intelligence warfighting function as involving Army Military Intelligence (MI) formations. Modularity inactivated the ten active Army MI Battalions organic to each Division and instead provided robust intelligence capabilities at lower levels in the forty-five maneuver BCTs. Each BCT has a robust, organic MI company with a large BCT

S2 section (G2 sections at Division, Corps and Army were also increased) creating more capability throughout the force which mitigated the inactivation of the Divisional MI Battalion.

The Army currently has eight MI Brigades and twenty-five Battalions supporting all elements of the Army. The MI branch and the Army at large are incorporating lessons learned from OIF, OEF, and other operations to ensure the requisite intelligence capabilities reside at elements below Division. This has created significant increases in tactical intelligence requirements that the Army is fulfilling by aggressively fielding new capabilities (technological and organizational) down to Battalion and Company levels. These increases include Human Intelligence (HUMINT), Signal Intelligence (SIGINT) and revising Intelligence, Surveillance, and Reconnaissance (ISR) strategies to provide more capabilities to soldiers at the tactical level.³⁵ The ability of the Army to accomplish these aggressive plans is somewhat in question as near term financial constraints may hinder their realization. The extent of their completion will determine the Army's next set of goals for the Intelligence force in the 2016-2020 timeframe. The majority of these updates, fieldings, and increases in MI capability will take place at or near planning horizons, greatly increasing the intelligence collection and analysis capability of the Intelligence Warfighting function and thus setting favorable conditions for 2016-2020.

With this said, incremental adjustment to the Intelligence Warfighting function and increases in capability will need to be made in the 2016-2020 timeframe to effectively counter adaptive state and non-state actors, primarily in the cyber domain. The challenge to the MI force in this time frame is to be adaptable and versatile at all levels (tactical, operational, and strategic) to mitigate the "uncertainty, complexity, and change," that will occur within the enemies of the United States and our interests as they (enemy) become more decentralized and complex.³⁶ This complexity will only increase, and thus the MI force must continue to develop career tracks and

ingrain in the force the flexibility not only to assess emerging threats but also to field a force able to collect, analyze, synthesize and disseminate intelligence to decision makers at all levels in order to enable decisive results.³⁷

With stated challenges to the intelligence WFF force and ongoing modernization efforts, it is evident that efforts to leverage the MI focus at the lowest tactical level should be sustained. Of concern are impacts of cyber operations which while not a purely MI domain will need to be synchronized with all other cyber domains (CYBERCOM, Signal Branch, Inter-agency partners, etc). The requirement to increase cyber capabilities at all levels of war does not warrant an increase in military intelligence organizations but an adaptability and focus of efforts. With constrained financial realities in mind, the conversion of select intelligence staff sections and intelligence units themselves, along with elements of Signal Corps units, can create capabilities in the near and long term. Thus, the current organization of eight MI Brigade and twenty-five MI Battalions should remain the same in 2016-2020 while unit missions and the organization of select intelligence staffs should be adjusted to better carry out intelligence functions in the cyber domain.

Protection Warfighting Function.

The Protection warfighting function consists of the related tasks and systems that preserve the force so the commander can apply maximum combat power against the enemy.³⁸ For this paper Protection will refer to Air and Missile Defense (AMD) and Military Police units. These formations are key to protecting the force as Tactical Ballistic Missiles (TBM) and wide area security concerns are common now and will increase in 2011-2015 and 2016-2020, respectively.

The Army's plan for Protection in the 2011-2015 timeframe includes a strong emphasis on Air and Missile Defense (AMD) due to "increasing ballistic and cruise missiles, manned and unmanned aerial systems, rockets, artillery, and mortars."³⁹ Due to these concerns, in 2011 the Patriot System will complete the Pure Fleet initiative which ensures all 5 AMD Brigades and 15 AMD battalions have the most current PAC-3 missile to protect the warfighter and US assets.⁴⁰ Other updates include modernization of improved Sentinel radars NLT 2015; integration and deployments of the Counter Rockets, Artillery, and Mortars (C-RAM) systems; and Terminal High Altitude Air Defense (THAAD) Batteries for a total of seven (two currently fielded).⁴¹ A key setback but indicative of financial reality was the January 2011 cancellation of the Surface Launched Advanced Medium-Range Air-to-Air Missile (SLAMRAAM) program. Hampered by a lack of priority compared to COIN operations, SLAMRAAM's cancellation greatly hinders US AMD in mitigating cruise missile threats against ground forces.

The MP force has been a low density, high demand specialty since 9/11 due to its core mission directly supporting COIN type missions in Iraq and Afghanistan. This frequency of use is expected to continue as the MP mission set is updated to further support Army "wide area security" type missions of the future. Currently the MP force consists of 5 Brigades, 21 Battalions, and MP platoon size elements organic to the 45 maneuver BCTs. MP updates for 2011-2015 include modernizing equipment and updating tactics, techniques and procedures in the current COIN fight while developing doctrine in regards to wide area security as incorporated in the Army Operating Concept.⁴²

The afore mentioned initiatives for AMD and MP forces can ensure adequate capabilities exist for the threats of 2011-2015. Of concern for 2016-2020 are the ability of the US Army AMD forces to counter low flying UAV and cruise missile threats, given SLAMRAAMs

cancellation, and the MP force's ability to provide key support for still to be defined "wide area security" type mission sets.

The QDR mandated 15 Patriot and 7 THAAD Batteries to counter current and projected threats.⁴³ This force structure is sufficient for anticipated threats in 2016-2020 but knowingly has a capability gap against cruise missiles. The Department of Defense is attempting to mitigate this gap with joint and international partners. A costly but still ongoing effort to replace Patriot with Medium Extended Air Defense System (MEADS) starting in 2016 with anticipated completion by 2024 is an attempt to mitigate this cruise missile gap. This attempt while positive will be assisted by ongoing Patriot modernization initiatives to increase US counter-cruise missile capabilities.

The MP force will continue to fill high OPTEMPO force requirements in Iraq and Afghanistan, which will further grow a very combat experienced force but also one under stress. Since this demand should remain steady, the current MP units are able to fill anticipated requirements in 2016-2020 adequately with the current force of 5 MP Brigades, 21 Battalions, and MP Platoons in all BCTs.

Mission Command Warfighting Function.

The Command and Control (C2) WFF is currently under revision and will be released soon in an updated FM 3-0, *Operations*. While previously the C2 WFF function was defined as, "related tasks and systems that support commanders in exercising authority and direction," the new WFF of Mission Command will incorporate C2 and battle command. This change in the 2011-2015 timeframe is being led by the Training and Doctrine Command (TRADOC) Commander General Martin E. Dempsey, who was recently nominated to be the next Army Chief of Staff. General Dempsey notes that the change to a mission command warfighting

function, “implies decentralization of capability and authority.” A further change in mission command, which are lessons learned from OEF and OIF, is that information from lower tactical elements is just as important as the information coming from strategic echelons. Another change is that leaders at all levels are “co-creators of context” in that they not only must share their understanding of the environment to inform the led and their leaders but must early on understand the true problem before trying to solve it.⁴⁴ Other updates in 2011-2015 include modernization efforts to merge numerous mission command data systems, upgrading and fielding of tactical radios across the Total Army, and creating mounted battle command applications to ensure systems can be used on the move.⁴⁵ These efforts are financially intensive and due to fiscal challenges will be spread across funding cycles, most likely into the 2016-2020 timeframe. The impacts of modernization will no doubt set favorable conditions for 2016-2020.

For this paper, Mission Command will refer to the current composition and capability of Army Headquarters elements at the Division and Corps levels. Army Transformation modified the manning and equipment compositions of ten active Division and four Corps Headquarters (HQ,) each consisting of eight hundred and one-thousand soldiers respectively, to be more deployable and capable while having no organic subordinate units as in the past. Instead, modularity provided BCTs as attachments to Divisions with the Division HQ’s providing TRO (Training, Readiness, and Oversight) of BCTs in garrison and as attachments during mission execution (or deployments). Modular Division HQ’s are equipped, staffed, and capable of directing one to six BCTs and applicable support Brigades independently for extended periods. Although the Army is BCT centric, the Division remains the principal warfighting command and control echelon. Corps HQ’s no longer have organic Divisions but receive them as attachments as missions dictate. Modular Corps HQ’s now have the capability to serve as an Army Force HQ,

Joint Task Force (JTF), Joint Force Land Component Command (JFLCC) or even JTF HQ for support to civil authorities.⁴⁶

Due to requirements and ongoing modernization efforts, adjustments to Mission Command for 2016-2020 must include maintaining, even in fiscally constrained environments, the ten Division and four Corps Headquarters in order to properly train, prepare, and if needed, conduct full spectrum operations against known threats or unforeseen contingencies. If reductions are required, one Division HQ should be the first reduction with a Corps HQs the next feasible option. With this said, an absolute necessity in the 2016-2020 timeframe is the ability to operate, conduct, and share information via mounted battle command applications such as Command Post of the Future (CPOF). Currently, due to limitations and habits created in the COIN fight much of the Situational Awareness (SA) and Situational Understanding (SA) tools that the force uses, specifically at Division, Corps, and Army levels, are dependent on stationary and static data connections and systems. This was feasible during a COIN type environment but to be truly capable of full spectrum operations this will need to be rectified, trained on and experienced by commanders and staffs at all levels prior to 2016.

Sustainment Warfighting Function.

The Sustainment warfighting function relates to the task and systems that provide support to ensure endurance for the operational force, freedom of action, and increased operational reach. The ability of Army forces to conduct any and all operations is directly tied to their ability to be sustained while performing their missions. This affects the initiative, depth and duration of operations. While the Sustainment WFF includes many sub-elements (Logistics, Personnel Services, Health Service Support and elements of internment, resettlement and detainee operations) for this paper the Sustainment WFF will refer to Logistics and specifically Army

Expeditionary Support Command (ESC), Sustainment Brigade (SB), and Theater Support Command (TSC) force structures.⁴⁷

With Army Transformation, the Sustainment of Army forces was significantly changed. Ten Divisional Support Commands (DISCOMs) were inactivated and replaced by scalable Sustainment Brigades (SB) with functional and multifunctional subordinate units. SB's are organized and equipped to perform sustainment operations at the tactical to operational levels. At echelons above SB's are Expeditionary Sustainment Commands (ESC) or Theater Sustainment Commands (TSC) which provide operational level sustainment to theater armies. Additional Sustainment capabilities were also pushed down and placed organically in the maneuver BCTs. Thus, BCTs now have an organic capability to self-sustain for up to 72 hours of combat operations with longer operations requiring division or corps level SB support.⁴⁸ This Sustainment unit structure is often referred to in Army circles as truly "plug and play" as these interoperable elements can quickly task organize to fit the unique situation and sustain the force. The Army currently has three Theater Sustainment Commands, four Expeditionary Sustainment Commands (ESC), twelve Sustainment Brigades (SB) and forty-five Brigade Support Battalions (BSB) organic to maneuver BCTs.

This modular Sustainment structure has demonstrated its competence as it supports combat operations, forward presence, and deterrence while sustaining approximately 230,000 Soldiers in 80 countries with over 140,000 currently serving in Iraq, Afghanistan, Kuwait, and the Horn of Africa.⁴⁹ The scope of logistical challenges, current capabilities, and near flawless execution are exemplified by the following actions in 2010: returned 60,000 troops home from Iraq, reduced equipment in Iraq from 3.2 million to 1.2 million pieces, and moved 30,000 troops and equipment into Afghanistan while also responding to the devastating Haiti earthquake.⁵⁰

Sustainment modernization in 2011-2015 includes fielding the Single Army Logistics Enterprise (SALE), which replaces numerous Army logistics databases and systems for one Internet-accessible solution integrating tactical and national logistic systems. Other efforts include updated material handlers such as the M10A Forklift, improved water trailers, deployable base camp life support (i.e. advanced scalable tentage), and improved field feeding capabilities. These efforts will increase efficiencies while reducing logistical footprints.⁵¹

Anticipated requirements and challenges for Sustainment in the 2016-2020 timeframe include the need for increased decentralization of logistics with Joint, Interagency, Intergovernmental, Multinational (JIIM) partners and commanders enabling "decisive action by leaders at lower echelons to provide commanders with operational adaptability."⁵² Another key requirement identified in the Army Operating Concept is further improvements utilizing joint deployment and distribution enterprises; in short, the ability to track movement and conditions of supplies, equipment, unit status, and people in order to properly sustain the force.⁵³

Upon review of the Sustainment WFF few adjustments are needed, other than the aforementioned modernization efforts, to prepare for 2016-2020. In fact, the Sustainment WFF's forty-five BSBs, twelve SBs, four ESCs and three Theater Sustainment Commands provide combat proven capability to sustain the force. This capability is sufficient now and will require sustainment of fewer forces in the future (i.e., ongoing drawdown in Iraq and anticipated Afghanistan drawdown). Thus, the Sustainment WFF force can be decreased incrementally by one to two SB's to enable Maneuver BCT conversions (i.e. conversion of two IBCTs to SBCTs).

Related to the recommendation of a one to two SB force reduction, a unique aspect of the Sustainment WFF is the inter-connectivity of the military logistics community with industry;

specifically, logistics corporations that can assist and fill urgent and repetitive requests thus mitigating the risk inherent in reduction of Sustainment forces.

Conclusion

This paper outlined the modular Army's current structure, adjustments in the 2011-2015 timeframe, how the Army envisions the future, and recommended adjustments by Warfighting function for 2016-2020. This review and analysis leads to the conclusion that Army leaders must adjust the 2016-2020 active force structure capabilities to address emerging threats such as cyber, refine anticipated future requirements in support of wide area security, while rebuilding core proficiencies in combined arms maneuver that atrophied during COIN operations the past nine years. With financial realities and planned force reductions in mind this can be accomplished by adjusting Warfighting Function force capabilities as follows; converting two Infantry Brigade Combat Teams (IBCTs) to Stryker Brigade Combat Teams (SBCT); modernizing but maintaining current Field Artillery force structure; adjusting Intelligence organizations and staffs to counter cyber threats; maintaining and modernizing Protection efforts, specifically Air and Missile Defense (AMD) and Military Police; conducting a small reduction of one to two SB's in the Sustainment forces; and finally, maintaining current numbered Headquarters at Corps and Division levels to adequately conduct Mission Command (formerly known as command and control).

These changes to active Army force structure in the 2016-2020 timeframe, if adopted, could increase the US Army's ability to conduct full spectrum operations with a clear focus and effort towards wide area security and cyber while regaining core proficiencies in combined arms maneuver. These efforts could mitigate emerging security threats while retaining resident capabilities to confront contingencies. These adjustments to the active Army's force posture,

while controversial to some in the Army community, specifically Logisticians, would better prepare the entire Army community (Active, Reserve, Guard, Industrial base, etc) and in turn the nation for emerging threats and full spectrum operations.

These findings are an important aspect of the ongoing political discussion across America regarding the financial condition of the federal government and defense spending in particular. The proper preparations for current and future security challenges facing the nation, the DOD, and the U.S. Army are nothing new and are a testament to the US's leadership role and security challenges in the post 9/11 world. Defense spending will likely be reduced further so an even more pressing challenge is the proper utilization of existing funds to win the current wars, prepare for contingencies with a strategic outlook (i.e., security cooperation efforts worldwide) while transforming and preparing for the future. This paper's analysis provides a starting point for further discussion regarding these challenges.

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Glossary (Acronyms)

AD – Air Defense
AFRICOM – African Command
BCT – Brigade Combat Team
CENTCOM – Central Command
COCOM – Combatant Commander
DISCOM – Division Support Command
DOD – Department of Defense
ESC – Enhanced Sustainment Command
GPF – General Purpose Forces
HBCT – Heavy Brigade Combat Team
IBCT – Infantry Brigade Combat Team
JIIM – Joint, Interagency, Intergovernmental, Multinational
MEADS – Medium Extended Air Defense System
MP – Military Police
OEF – Operation Enduring Freedom
OIF – Operation Iraqi Freedom
OND – Operation New Dawn
QDR – Quadrennial Defense Review
SALE – Single Army Logistics Enterprise
SB – Sustainment Brigade
SBCT – Stryker Brigade Combat Team
SOF – Special Operations Forces
TBM – Tactical Ballistic Missile
THAAD – Terminal High-Altitude Air Defense
TSC – Theater Security Cooperation
WFF - Warfighting Function

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